
फोसालोन डस्टिंग पाउडर्स — विशिष्टि

(पहला पुनरीक्षण)

Phosalone Dusting Powders — Specification

(First Revision)

ICS 65.100.10

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BUREAU OF INDIAN STANDARDS
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Price Group 4

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Divisional Council.

Phosalone dusting powder formulations are used in the control of insect pests and mites of agricultural crops.

Phosalone dusting powder formulations are generally manufactured to contain 4 percent (*m/m*) of phosalone.

This standard was first published in 1977. In this revision, the standard has been brought out in the latest style and format of the Indian Standards. It also incorporates two amendments issued to this standard.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, wherever applicable.

The composition of the Committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***PHOSALONE DUSTING POWDERS — SPECIFICATION***(First Revision)***1 SCOPE**

This standard prescribes the requirements and the methods of sampling and test for phosalone dusting powders.

2 REFERENCES

The standards, given below contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

<i>IS No.</i>	<i>Title</i>
IS 460 (Part 1) : 2020	Test Sieves — Specification: Part 1 Wire cloth test sieves (<i>fourth revision</i>)
IS 6940 : 1982	Methods of test for pesticides and their formulations (<i>first revision</i>)
IS 8190 (Part 1) : 1988	Requirements for packing of pesticides: Part 1 Solid pesticides (<i>second revision</i>)
IS 8488 : 2022	Phosalone technical — Specification (<i>first revision</i>)

IS 10627 : Methods for sampling of pesticidal formulations

3 REQUIREMENTS**3.1 Description**

The material shall be in the form of a powder. It shall be free flowing and devoid of lumps. Phosalone, technical used in its manufacture shall have been uniformly mixed in suitable fillers, such as talc or pyrophyllite. The material, when dusted from a hand rotary duster, shall issue freely without clogging or bridging.

Phosalone, technical employed in the manufacture of dusting powder formulations shall conform to IS 8488.

3.2 The material shall also comply with the requirements given in Table 1.

3.3 Phosalone Content

When determined by the method prescribed in Annex A of IS 8488 and **7.1.1** and **7.1.2**, the observed phosalone content, percent by mass of any of the samples shall not differ from the declared nominal value by more than percent tolerance as indicated below:

<i>Nominal Value, percent</i>	<i>Tolerance, percent</i>	
Up to 9	+10 -5	} of the nominal value
Above 9 and below 50	±5	
50 and above	+5 -3	

Table 1 Requirements for Phosalone Dusting Powders
(Clause 3.2)

Sl No.	Characteristic	Requirement	Method of Test, Refer to
(1)	(2)	(3)	(4)
i)	Phosalone content, percent by mass	Nominal value as declared on the container (<i>see 3.3.1</i>)	Annex A of IS 8448
ii)	Material passing through 75 micron IS sieve [<i>see IS 460 (Part 1)</i>], percent by mass, <i>Min</i>	90	IS 6940

Table 1 (Concluded)

Sl No.	Characteristic	Requirement	Method of Test, Refer to
(1)	(2)	(3)	(4)
ii)	Bulk density after compacting	Not to exceed the value obtained before compacting by more than 60 percent	IS 6940
iii)	Acidity (as H ₂ SO ₄) percent by mass, <i>Max</i> or Alkalinity (as NaOH), percent by mass, <i>Max</i>	0.25 0.04	IS 6940 IS 6940

The actual value of the phosalone content in the formulation shall be calculated to the second decimal place and then rounded off to first decimal place before applying the tolerances as stipulated in 3.3.

4 PACKING

The material shall be packed according to the requirements given in IS 8190 (Part 1).

5 MARKING

5.1 The containers shall be securely closed and shall be bear legibly and indelibly the following information:

- Name of the material;
- Name and address of the manufacturer;
- Batch number;
- Date of manufacture;
- Date of expiry;
- Net quantity;
- Nominal phosalone content, percent (m/m);
- Cautionary notice as worded in the *Insecticides Act*, 1968, and Rules framed thereunder; and
- Any other information required under the *Legal Metrology (Packaged Commodities) Rules*, 2011.

5.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

6 SAMPLING

When freshly manufactured material in bulk quantity is offered for inspection, representative samples of the material shall be drawn and tested as prescribed in IS 10627 within 90 days of its manufacture. When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627. However, the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under Clause 3.3 of the standard.

7 TEST

7.1 Tests shall be carried out by the methods as specified in col 4 of Table 1.

7.1.1 For gas chromatographic test for determination of phosalone content, start with 4 g of sample and 0.05 to 0.07 g of internal standard in 5 ml of diethylether, and take 0.15 to 0.17 g of standard and 0.05 to 0.07 g of internal standard for standard solution.

7.1.2 For spectrophotometric determination of the phosalone content, start with an accurately weighed sample up to third decimal place by applying the formula $\frac{A \times B}{C}$ in 100 ml beaker.

7.2 Quality of Reagent

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A
(Foreword)

COMMITTEE COMPOSITION

Pesticides Sectional Committee, FAD 01

<i>Organization</i>	<i>Representative(s)</i>
Directorate of Plant Protection Quarantine and Storage, Faridabad	DR RAVI PRAKASH (<i>Chairperson</i>)
All India Biotech Association, New Delhi	SHRI SAURABH SINGHAL SHRI SHAH JI DHAR (<i>Alternate</i>)
Central Insecticide Board and Registration Committee, Faridabad	SECRETARY DR VANDANA SETH (<i>Alternate</i>)
Central Insecticide Laboratory, Faridabad	DR ARCHANA SINHA SHRI SUBHASH CHAUDHARY (<i>Alternate</i>)
Consumer Guidance Society of India, Mumbai	SHRI. SITARAM DIXIT DR M. S. KAMATH (<i>Alternate</i>)
Crop Care Federation of India, New Delhi	DR J. C. MAJUMDAR
Crop Life India, New Delhi	SHRI ASITAVA SEN MS NIRUPAMA SHARMA (<i>Alternate</i>)
CSIR-Indian Institute of Toxicology Research, Lucknow	DIRECTOR DR SHEELENDRA P. SINGH
FMC India Pvt. Limited, Bengaluru	SHRI CHIRAG PATEL
Food Safety and Standards Authority of India, New Delhi	ADVISOR (STANDARDS)
IDMA Laboratories Limited, Chandigarh	DR INDRA RAI
Indian Agricultural Research Institute, New Delhi	DIRECTOR
Indian Institute of Packaging, Mumbai	DR TANWEER ALAM
Indian Pest Control Association, New Delhi	SHRI UDAYAN GHOSH
Institute of Pesticide Formulation Technology, Gurgaon	DR M. VAIRAMANI
Ministry of Agriculture, Department of Agriculture, Chennai	JOINT DIRECTOR OF AGRICULTURE (RES.) DEPUTY DIRECTOR LAB (<i>Alternate</i>)
National Centre for Integrated Pest Management, New Delhi	DR SUMITRA ARORA
National Institute of Plant Health Management, Hyderabad	DR. MAHESH SAINI MS T. SRIDEVI (<i>Alternate</i>)
Pesticide Manufacturers and Formulators Association of India (PMFAI), Mumbai	DR ARCHANA SRIVASTAVA DR UDAY KUMAR (<i>Alternate</i>)

<i>Organization</i>	<i>Representative(s)</i>
Regional Pesticides Testing Laboratory, Chandigarh	SHRI V. VASU
In Personal Capacity (4-6-90/2/8/2, Sri Devi Nilayam Tejaswinagar Coloni, Attapur, Hyderabad – 500048)	SHRI C. V. RAO
In Personal Capacity (263, Sector 28, Faridabad – 121008, Haryana)	SHRI VIPIN SAINI
BIS Directorate General	SHRIMATI SUNEETI TOTEJA, SCIENTIST 'E'/DIRECTOR AND HEAD (FOOD AND AGRICULTURE) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI KULDEEP MITTAL
SCIENTIST 'B'/ASSISTANT DIRECTOR
(FOOD AND AGRICULTURE), BIS

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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